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# The Access Gap: Poverty and Characteristics of School Library Media Centers

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## THE ACCESS GAP: POVERTY AND CHARACTERISTICS OF SCHOOL LIBRARY MEDIA CENTERS

Shana Pribesh,<sup>1</sup> Karen Gavigan,<sup>2</sup> and Gail Dickinson<sup>3</sup>

Stephen Krashen believes that schools can counter the effects of poverty in at least one area: access to books. However, little research has been done to determine whether students living in poverty have access to school library services comparable to those attending schools with low concentrations of students living in poverty. We examined the school library access gap; namely, the differences in school library characteristics (staffing, books added to collection, schedule, and number of days closed) in schools with various concentrations of students living in poverty. Alarmingly, we found that the students in most need—those attending schools with the highest concentrations of students living in poverty—had the fewest school library resources to draw on. Findings suggest that if we hope to close achievement gaps between high and low socioeconomic groups, we must attend to the access gap in school libraries in high- and low-poverty schools.

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Stephen Krashen believes that schools can counter the effects of poverty in at least one area: access to books [1]. Indeed, a hallmark of school library service throughout the past century has been for school library media centers to be open and accessible to all students. As stated in the American Association of School Librarians' *Position Statement on the Value of Library Media Programs in Education*, "In today's information age, an individual's success, even existence, depends largely on the ability to access, evaluate, and utilize information" [2].

However, little research has been done to determine what access students living in poverty have to school library services and whether those services

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are comparable to those for students attending schools that do not have high concentrations of students living in poverty. Students most in need of academic support may have fewer opportunities to use school libraries than affluent and middle-class students who may not need as many supports. Plainly put, children living in poverty may be further disadvantaged by an access gap—having restricted access to school libraries or access to school libraries that are underresourced. This study explores school library characteristics in schools with different levels of students living in poverty to dispel or reinforce the notion that students living in poverty have equal access to and support from school libraries as those students who do not live in poverty. Specifically, we examine differences in staffing, books added to collections, schedule, and number of days closed in schools with various concentrations of students living in poverty.

### Review of the Literature

The framework for this study is drawn from concepts of equitable access to library resources and services. Wayne Wiegand has noted that libraries do three things very well: first, they make information accessible; second, they provide a meeting place for both social and instructional programming; and third, they provide materials for leisure and information reading [3]. As early as 1929, access to libraries was seen as vital to the success of library media centers [4]. This emphasis has been institutionalized in seminal library documents such as *Access to Resources and Services in the School Library Media Program, an Interpretation of the Library Bill of Rights* [5]. Equal and open access has been articulated in national guidelines such as *Empowering Learners* [6]. Access to school library media programs has been further outlined in studies of flexible access, the impact of access on achievement, as well as access to resources.

#### *School Libraries and Poverty*

The research examining the role that poverty plays in access issues in school library media centers is sparse. In 1990, the American Library Association (ALA) created a policy statement, *Library Services for the Poor*. The first objective in that policy statement is “promoting the removal of all barriers to library and information services” [7]. However, only one book in the field of librarianship specifically addresses library services in the context of poverty. *Poor People and Library Services* focuses on *public* library services rather than *school* library media services [8]. Karen Venturella examined barriers to public libraries that are intertwined with class and race and found that public library services were not accessible to all; those living in poverty were greatly disadvantaged when it came to accessing the public

library system. Two notable barriers to public library access are the assessment of fees and access to electronic resources. Fees for services and overdue fines often serve as an economic obstacle for low-income library patrons. Charging patrons fees and/or overdue fines weighs heavily on clients living in poverty who can be denied access to library resources if they accumulate a significant amount of overdue fees.

Library access to electronic resources is another widely acknowledged economic barrier. Funding for technology often tends to go to libraries that already have electronic resources [9]. Limited access to online job searching tools, e-mail communication, and opportunities to create documents (such as résumés) can result in an even greater divide between rich and poor people. In her book, Venturella [8] strongly advocated that ALA dedicate resources to making opportunities to use public libraries equal to all regardless of class or race.

Susan Neuman and Donna Celano examined the relationship between school library media closings and poverty and found that school library media centers in middle-income neighborhoods were open more days per week than school library media centers in low-income neighborhoods [10]. On average, libraries were open about three days a week in low-income neighborhoods compared with five days a week in middle-income neighborhood schools. Ironically, this study showed that those children who would benefit the most from access to school library resources were the ones who had less access. When school library media centers are closed to lower-income children, the differences in access to print resources may have significant implications for children's early literacy development.

Research suggests that students who have access to print materials are more likely to read, thus improving their reading motivation and achievement. For example, Jo Worthy, Megan Moorman, and Margo Turner examined the reading preferences and access to reading materials of 419 sixth-grade students in the southwestern United States [11]. The sample was divided into high- and low-income groups based on eligibility for free and reduced-price lunch (FRPL). Sixty-three percent of the lower-income children used the school library, compared with 40 percent of the students from higher-income families. There is cause for concern when economically disadvantaged students, who use the school library at a greater rate than their higher-income peers, might have less access to school libraries than students who are more affluent.

#### *School Libraries and Student Achievement*

Research in the field of school library media impact on student achievement was limited until Keith Curry Lance, Christine Hamilton-Pennell, and Marcia Rodney published *The Colorado Study: Impact of School Library Media Centers on Academic Achievement* [12]. Since the seminal Colorado

study, the study has been replicated in fourteen other states: Alaska, Arkansas, Florida, Illinois, Iowa, Massachusetts, Michigan, Minnesota, Missouri, New Mexico, North Carolina, Oregon, Pennsylvania, and Texas. The results from these studies consistently indicate that access to school libraries improves student achievement [12–17].

In several of his studies, Lance addresses access issues when referring to the correlation between longer library media center hours and higher student usage and, consequently, test scores [12, 13, 16]. For example, in the Michigan study, he found that increases in librarian and staff weekly hours resulted in improvements in seventh-grade reading scores. The New Mexico study results were similar: increases in school librarian hours were positively correlated with reading achievement [15]. Furthermore, Burgin and Bracy [18] found that in North Carolina there was a statistically significant correlation ( $p = .008$ ) between the number of school library hours open in a typical week and student achievement. Student achievement tended to increase as the number of hours the school library was open increased. High-performing schools were open an average of 36.3 hours per week, whereas low-performing schools were open an average of 28.7 hours per week—over 20 percent fewer hours per week. Additional studies support the hypothesis that students' reading and reading achievement are positively correlated [1, 19, 20].

Other characteristics of school libraries may also affect student achievement. Rachel Houle and Claude Montmarquette found that students take more books out of school libraries that have larger collections and stay open longer [21]. Karen Gavigan, Shana Pribesh, and Gail Dickinson found that school libraries with flexible schedules had larger book circulation than those with fixed schedules [22]. And Gail Dickinson, Karen Gavigan, and Shana Pribesh observed that school library media centers that were closed fewer days in the course of a year had larger book circulation than those closed for larger spans of time [23]. Thus, it is likely that students with greater access to books will show more literacy development [1] than those with restricted access.

Although these studies have contributed significantly to advancing knowledge in the field of school library media services, there have been few, if any, studies that have solely examined characteristics of school libraries in schools with high concentrations of poverty compared with schools with low concentrations of poverty. This study draws a comparison of school libraries in high- and low-poverty schools and their accessibility, as well as resources offered to students.

## Methodology

This exploratory study addresses the question, “Do children in high-poverty schools have access to similar school libraries as children in low-poverty schools?” Characteristics of school libraries enhance (or impede) school library function and student achievement such as staffing, number of books added to collection, fixed or flexible schedule, and number of days closed. Specifically, we posed the following research question: Do characteristics of school libraries vary by concentrations of students in poverty?

### *Design*

A nonexperimental research design was used to explore the relationship between poverty, school libraries, and circulation. An online survey was designed and administered to a random sample of more than 600 school library media specialists. The cross-sectional data collection was designed to gather information about school libraries in such a way that we might describe school libraries in high- and low-poverty areas, as well as correlate library characteristics with library circulation.

The study is exploratory in nature, thus well suited to a nonexperimental design. Due to the nature of our research question, we were best served by collecting specific information from a random sample of school library media specialists. And, although true experimental research is often held as the gold standard in educational research, manipulating concentrations of students living in poverty at schools is both unfeasible and politically unpalatable. Thus, a nonexperimental design is appropriate for establishing baseline information about the possible relationship between poverty, school libraries, and circulation.

### *Participants*

The population consisted of public school library media centers in North Carolina and Virginia. Participants were selected from the two states because of our collegial relationships with the states’ school library media organizations. In fact, partial funding for the study was provided by the North Carolina School Library Media Association (NCSLMA) and the Virginia Educational Media Association (VEMA). NCSLMA and VEMA have approximately 1,000 members each and together represent almost one-third of all school library media specialists employed in North Carolina and Virginia.

The study sample consists of a 600-person random sample drawn from the approximately 2,000 NCSLMA and VEMA members. The sample was derived from members who were currently working as school library media specialists. We drew a random sample of sufficient size to provide a 95 percent confidence level with a confidence interval of approximately plus

or minus three points. Although the sample was not nationally representative, it was designed to be representative of the memberships of the two large school library media organizations.

Thirty percent of the 600-person sample responded (181 respondents). Two respondents indicated that they did not want to participate, and three entered blanks throughout the survey. With these records removed, we garnered a 29.3 percent response rate (176 respondents in the analysis file).

In table 1 we describe the sample. Of the 176 respondents, 64 percent worked in North Carolina, 51 percent worked at an elementary school, and 44 percent worked at suburban schools. Seventy-eight percent were the only library media specialist working at the school; however, 62 percent had access to thirty hours or more of part-time professional or clerical assistance. Forty-three percent of respondents worked in schools where 40 percent or more students were eligible for FRPL.

#### *Instrument and Measures*

The researchers developed a twenty-two question survey for online distribution. In the survey, we asked school library media specialists to describe their libraries, including the number of full- and part-time staff persons, number of books added to the collection in the past year, type of schedule used (fixed, partially flexible, or flexible), and how many days the school library media center was closed in the past year.

Because we were interested in the association with poverty, we asked school library media specialists about the students attending the schools and their eligibility for FRPL. Eligibility for FRPL is a common indicator of poverty. Students who are eligible for the nutrition program have to provide evidence that their family incomes are below a threshold pegged to federal poverty guidelines. And although librarians may not know which students are individually eligible, the percentages of those eligible at a school are common knowledge. Thus, we asked school librarians to report if less than 10 percent, between 11 and 20 percent, between 21 and 30 percent, between 31 and 40 percent, between 51 and 50 percent, or more than 50 percent of students were eligible for FRPL.

Because the survey was researcher-developed, we were concerned about establishing validity and reliability measures. To do so, we called on experts familiar with the school library media field. Specifically, we asked members of the VEMA and NCSLMA executive boards to review the survey for content validity. We also asked the board members to pilot test the survey. The feedback from the board members indicated that the survey was easy to navigate and that the items were both reliable and had a high level of content validity.

TABLE 1  
DESCRIPTION OF SAMPLE

SAMPLE DESCRIPTORS	TOTAL	
	N	%
Total	176	100
FRPL eligible students:		
< 10%	31	18
1%–20%	23	13
21%–30%	24	14
31%–40%	21	12
41%–50%	22	13
> 50%	53	30
Total	174	100
School type:		
Elementary	89	51
Middle	54	31
High	30	17
Detention	1	1
Total	174	100
FT librarians:		
1 FT librarian	135	78
1.5 FT librarians	4	2
2 FT librarians	32	18
2.5 librarians	2	1
Total	173	100
PT staff:		
None	36	21
< 30 hours	31	18
> 30 hours	108	62
Total	175	100
School location:		
Urban	32	18
Suburban	77	44
Rural	66	38
Total	175	100

NOTE.—FRPL = free or reduced-price lunch; FT = full time; PT = part time.

### *Data Collection*

Inquisite software is the development and management tool we used to administer the online survey. Online surveys have many advantages. Most school library media specialists have regular access to e-mail, online surveys—if designed correctly—are easy to take, and direct downloading of



data eliminates data entry errors common with mail surveys. Thus, the survey was e-mailed to over 600 school library media specialists who were members of VEMA or NCSLMA and whose e-mail addresses indicated they were working as public school librarians.

Initial returns were sparse, and further investigation revealed that spam filters on some school district e-mail servers rejected e-mails with attachments and links embedded in the e-mail. We attempted to contact non-respondents in ways that did not trigger e-mail filters, such as placing the survey on a university server. By taking such measures, we were able to increase the response rates to 30 percent.

### *Analytic Approach*

The survey data were collected on Inquisite and analyzed using SPSS 16.0 statistical software. Univariate statistics were used to describe the association between poverty and school library characteristics. Using correlational analysis, we examined the relationships between poverty and library characteristics. Specifically, we employed a type of generalized linear models: analysis of covariance (ANCOVA), which allowed us to model the relationship between the poverty and library characteristics. The reader should note that this study does not attempt to expose causal linkages between poverty and school library characteristics but merely reports conditions under which the two seem to be related.

### Findings

In this section, the results of our examination of poverty and school library characteristics are presented. First, we describe school library characteristics and how they vary by proportion of students in poverty. We then present significance tests to determine if poverty and library characteristics are correlated.

#### *Do Characteristics of School Libraries Vary by Concentrations of Students in Poverty?*

In our sample, 30 percent of schools served a student body that was made up of more than 50 percent of students who were eligible for free and reduced-priced lunches (see table 1). Thirty-one percent of the schools had student bodies that contained 20 percent or fewer students who were eligible for FRPL. The remaining 30 percent or so of schools in our sample served student bodies consisting of 20–50 percent of students eligible for FRPL.

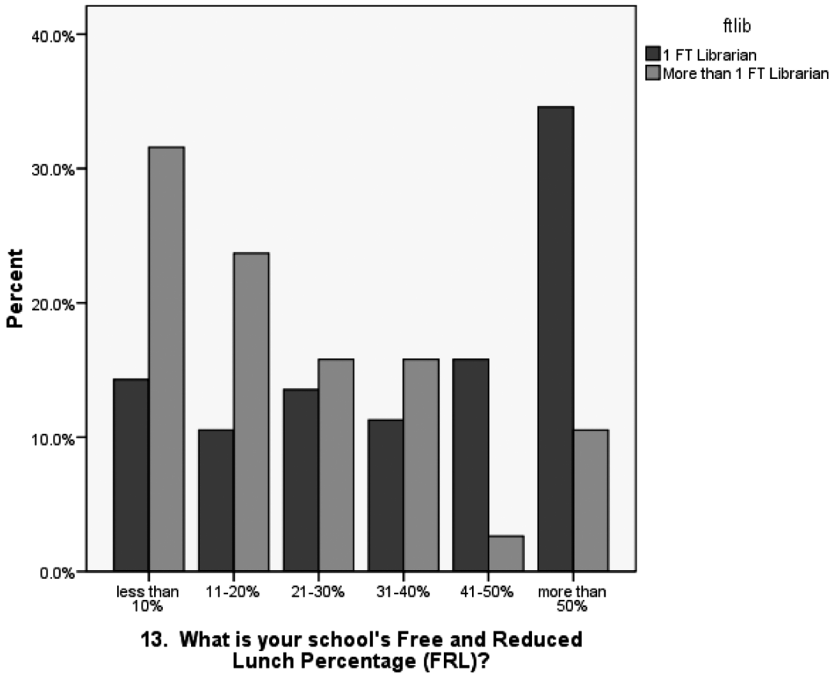


FIG. 1.—School FRPL eligibility by full-time librarians

*Staffing*

In figure 1, a graphic representation of the dispersion of full-time librarian staff across proportion of students eligible for free and reduced-price lunches is presented. Students in schools with less than 20 percent of students living in poverty were much more likely to have more than one full-time librarian on staff at the school library. Those attending schools with 41 percent or more of students in poverty were much more likely to have only one full-time librarian. These differences were statistically significant ( $F = 4.151_{(3,30, 5)}, p = .001$ ) (see table A1 in the appendix). Students attending schools with lower levels of students living in poverty were significantly more likely to have access to a library with more than one full-time librarian than those students attending schools with high levels of students living in poverty.

We factored in full- and part-time staffing levels to determine the number of staff hours per week at each school library. The differences in staffing hours in schools with low concentrations of students in poverty and those

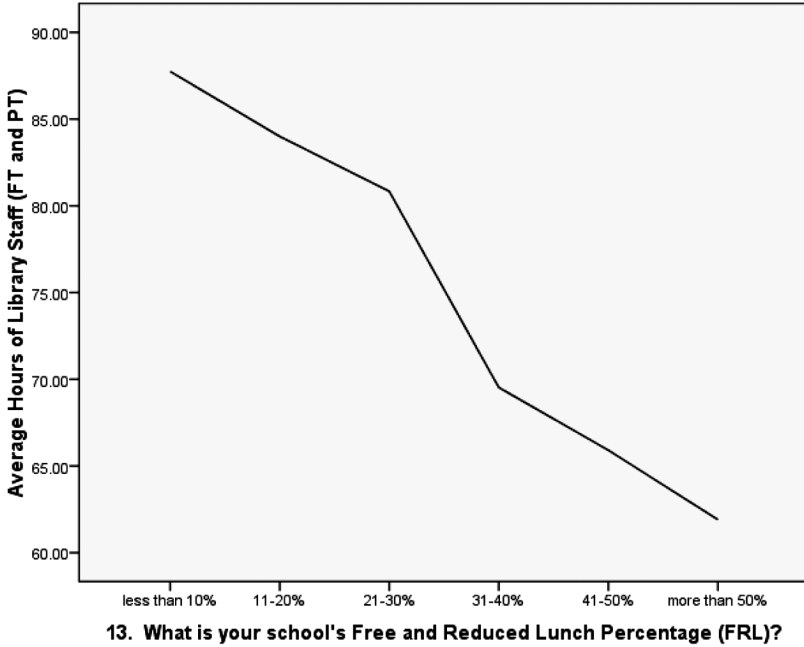


FIG. 2.—School FRPL eligibility by average hours of full-time and part-time library staff.

with high concentrations of students in poverty are dramatic (fig. 2). Again, these differences are statistically significant ( $F = 6.681_{(18706, 5)}$ ,  $p < .001$ ; see table A2). On average, students attending schools with few peers living in poverty were likely to make use of a school library with over eighty hours of staffing available a week. Students who attended schools with over 50 percent of peers living in poverty had school libraries with only 61.9 hours, on average, of staffing per week.

#### *Currency of Collection*

The number of books added to the collection that year is one measure of how “up to date” or current a library is. We found that students who attended schools with high-poverty thresholds were likely to have about 600 volumes added to the collection per year. This stands in contrast to the almost 1,400 volumes added to collections at schools where less than 10 percent of the student body lived in poverty (see fig. 3). These differences are statistically significant ( $F = 2.834_{(13013351, 5)}$ ,  $p = .018$ ; see table A3).

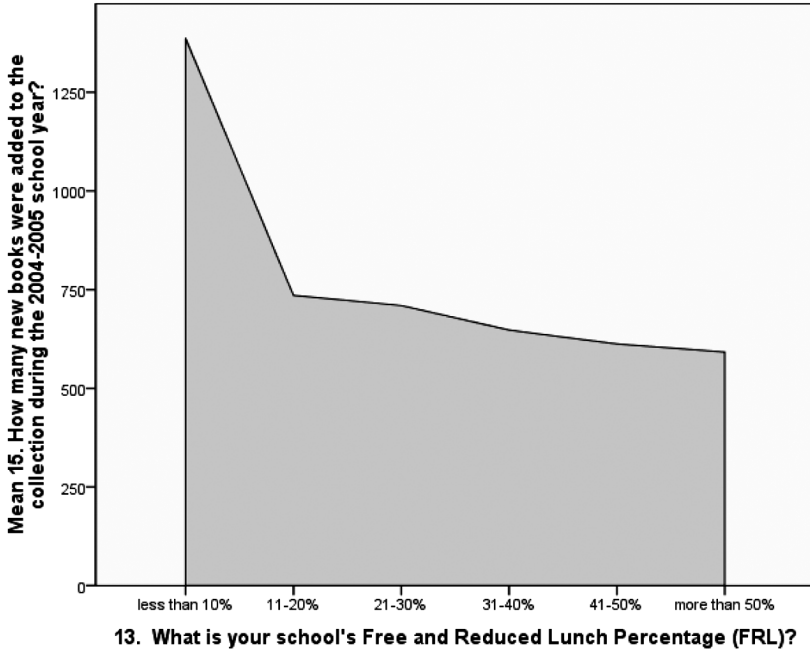


FIG. 3.—School FRPL eligibility by number of books added to collection

#### *Fixed or Flexible Schedule*

The type of schedule used by the school library—fixed, partially flexible, or totally flexible—has been found to be related to circulation levels [22]. In figure 4, we show that students attending high-poverty schools are likely to have a fixed schedule. Those enrolled in low-poverty schools are much more likely to have some sort of flexible schedule. Again, these differences are statistically significant ( $F = 3.510_{(9,85, 5)}$ ,  $p = .005$ ) (see table A4).

#### *Closures*

Dickinson, Gavigan, and Pribesh have found that school libraries are closed, on average, to circulation almost seven days for standardized testing and another seven or more days for assorted reasons (e.g., book fairs, beginning and end of school year) [23]. Thus, we examined the difference in closures across different poverty categories (see fig. 5). We found that students who attend schools with low concentrations of students in poverty were closed, on average, 12.21 days. This was statistically different than the approximately nineteen days school libraries were likely to be closed in

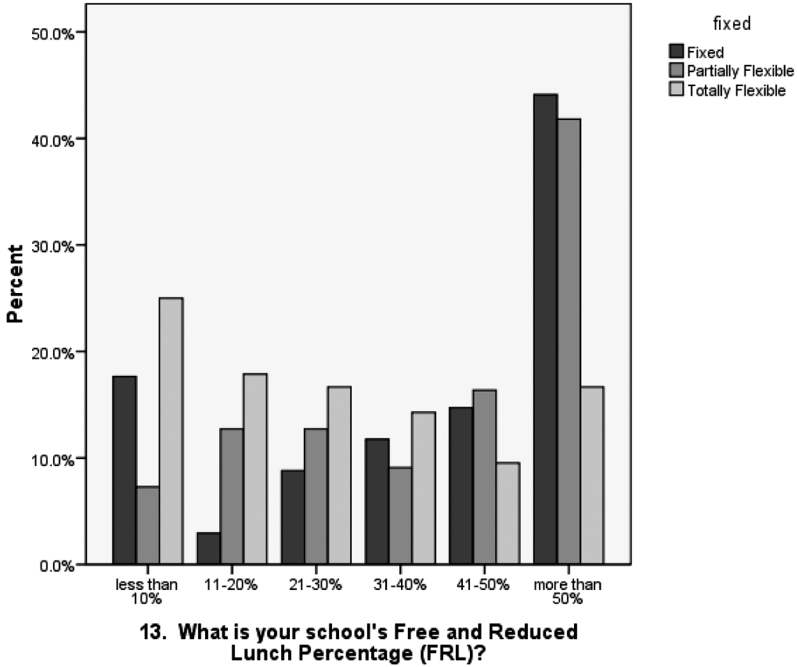
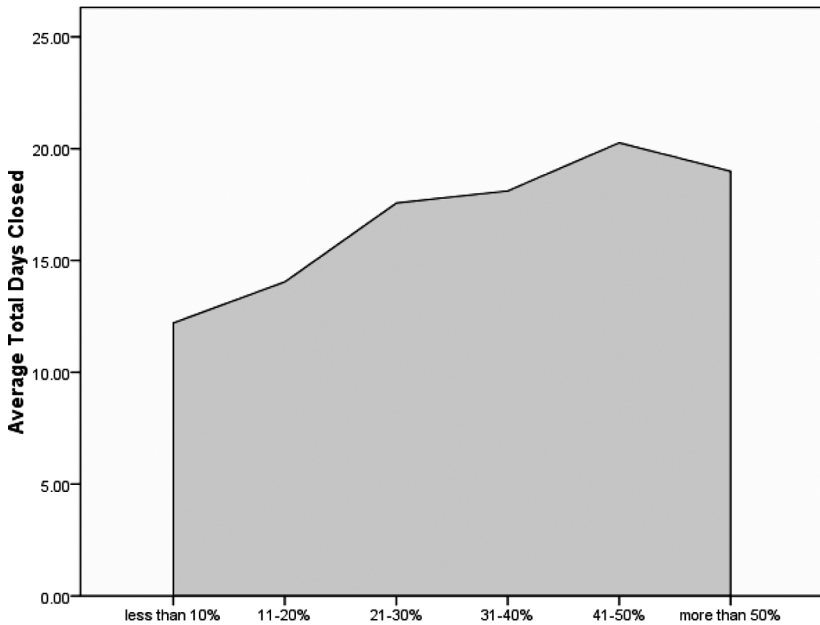


FIG. 4.—School FRPL eligibility by fixed or flexible schedule

schools with high levels of poverty ( $F = 2.263_{(1344, 5)}$ ,  $p = .051$ ) (see table A5). Additional examination of the reasons the school libraries were closed indicates that school libraries serving high-poverty student populations were more likely to be closed at the beginning and end of the school year, to host book fairs or special events, conduct health clinics or screenings, and because librarians were absent more often than those serving low-poverty populations. The number of days closed due to testing and school meetings was comparable across poverty levels.

Discussion

In this study, we examined the access gap—the possible difference in school library access for students attending schools with many students living in poverty versus those attending schools with few students living in poverty. By examining correlations between school library characteristics and student poverty, we found that there were consistent, statistically significant



13. What is your school's Free and Reduced Lunch Percentage (FRL)?

FIG. 5.—School FRPL eligibility by number of days closed

differences between libraries housed in schools with low and high concentrations of students living in poverty. Students who attended schools with high percentages of students living in poverty were likely to have access to fewer school library resources than those attending schools with low concentrations of students living in poverty. In other words, students who needed the most support had school libraries with significantly fewer staff persons, fewer new resources added each year, fixed schedules, and were closed almost a full week more than the schools with more affluent students.

Poverty may be counterbalanced in at least one area: access to books [1]. But the findings from this study indicate that students who attend schools with a preponderance of students living in poverty do not have equal access to library resources compared with students who attend schools with more affluent peers. The school library access gap may have repercussions. Students in high-poverty schools may lag behind student in low-poverty schools in attaining skills to enter the workforce such as the ability to access, evaluate, and use information.

The findings from this study should be considered preliminary and ex-

ploratory. We sampled school librarians from two states and have not linked poverty and library characteristics to student achievement. However, the patterns are significant and warrant some reflection. Library access and resources in schools with high concentrations of students living in poverty are not equal to those for more affluent populations. And although we do not know if differences in school library access and resources impact life outcomes, other work indicates that denying access to literature and reading materials may hinder academic performance.

Additional studies are needed to examine barriers to equal access to school library services for students living in poverty or attending schools where a large proportion of students are living in poverty. Such studies should examine access and equity issues in terms of materials, facilities, hours of access, and electronic resources. Graduate schools of library and information science may consider effective ways to prepare future generations of school librarians to work with students living in poverty, including expanding access in high-poverty schools.

## Conclusion

In 2007, 13.3 million U.S. children were living in poverty. Nearly one in five children in the United States is poor. When these children are compared with children from more affluent families, they are more likely to have low academic achievement, to drop out of school, and have health, behavioral, and emotional problems [24]. School library media centers have the potential to help bridge the poverty achievement gap by narrowing the school library access gap and providing access to books and other resources. The findings from this study indicate that there is a need for school libraries to adjust services offered to students attending high-poverty schools to mirror those offered more privileged patrons. Since library services to the poor are vital to the tenets found in ALA's *Library Bill of Rights and the Freedom to Read Statement* [25], additional studies are warranted to address ways in which school libraries can better serve students living in poverty.

Appendix

TABLE A1  
ANCOVA OF SCHOOL FRPL ELIGIBILITY ON FULL-TIME LIBRARIANS

SCHOOL FRPL ELIGIBLE	MEAN	SE	95% CI		SD	
			Lower Bound	Upper Bound		
< 10%	1.39	.072	1.246	1.529	a, b	
11%–20%	1.39	.083	1.227	1.556	c, d	
21%–30%	1.25	.081	1.089	1.411		
31%–40%	1.29	.087	1.114	1.458	e	
41%–50%	1.05	.085	.878	1.213	a, c	
> 50%	1.08	.056	.969	1.191	b, d, e	
Type III Sum						
	of Squares	df	Mean Square	F	SD	Partial $\eta^2$
Intercept	240.14	1	240.14	1,509.273	.000	.90
School FRPL eligible	3.30	5	.66	4.151	.001	.11
Error	26.25	165	.16			
Total	285.00	171				

NOTE.—The letters in the SD column indicate which categories are significantly different from one another. Categories with the same letter are significantly different, meaning that the point estimates are 95% likely to be different from one another. If a category of a variable has an “a” under the SD column, it is likely to be different from another category also labeled with an “a” in the SD column. ANCOVA = analysis of covariance; FRPL = free or reduced-price lunch; CI = confidence interval; FT = full time; PT = part time.  $R^2 = .112$  (adjusted  $R^2 = .085$ ).

TABLE A2  
ANCOVA OF SCHOOL FRPL ELIGIBILITY ON FULL-TIME LIBRARIANS

SCHOOL FRPL ELIGIBLE	MEAN	SE	95% CI		SD	
			Lower Bound	Upper Bound		
< 10%	87.74	4.250	79.351	96.133	a, b, c	
11%–20%	84.00	4.934	74.259	93.741	d, e, f	
21%–30%	80.83	4.830	71.297	90.370	g, h	
31%–40%	69.52	5.164	59.329	79.719	a, d	
41%–50%	65.91	5.045	55.949	75.869	b, e, g	
> 50%	61.90	3.282	55.425	68.382	c, f, h	
Type III Sum						
	of Squares	df	Mean Square	F	SD	Partial $\eta^2$
Intercept	881,211.76	1	881,211.76	1,573.713	.000	.90
School FRPL eligible	18,706.23	5	3,741.25	6.681	.000	.17
Error	93,512.84	167	559.96			
Total	1,047,617.00	173				

NOTE.—See table A1 note for an explanation of the letters in the SD column. ANCOVA = analysis of covariance; FRPL = free or reduced-price lunch; CI = confidence interval; FT = full time; PT = part time.  $R^2 = .167$  (adjusted  $R^2 = .142$ ).



TABLE A3  
ANCOVA OF SCHOOL FRPL ELIGIBILITY ON NUMBER OF BOOKS ADDED TO COLLECTION

SCHOOL FRPL ELIGIBLE	MEAN	SE	95% CI		SD	
			Lower Bound	Upper Bound		
< 10%	1,386.46	181.109	1,028.590	1,744.338	a, b, c, d, e	
11%–20%	735.45	204.319	331.718	1,139.191	a	
21%–30%	709.44	225.883	263.097	1,155.792	b	
31%–40%	647.55	214.291	224.108	1,070.992	c	
41%–50%	612.11	219.858	177.663	1,046.548	d	
> 50%	592.06	138.324	318.732	865.393	e	
	Type III Sum of Squares	df	Mean Square	F	SD	Partial $\eta^2$
Intercept	84,289,584.93	1	84,289,584.93	91.777	0.000	0.38
School FRPL eligible	13,013,351.22	5	2,602,670.24	2.834	0.018	0.09
Error	136,843,630.42	149	918,413.63			
Total	243,957,849.00	155				

NOTE.—See table A1 note for an explanation of the letters in the SD column. ANCOVA = analysis of covariance; FRPL = free or reduced-price lunch; CI = confidence interval; FT = full time; PT = part time.  $R^2 = .087$  (adjusted  $R^2 = .056$ ).

TABLE A4  
ANCOVA OF SCHOOL FRPL ELIGIBILITY ON A FIXED VERSUS FLEXIBLE SCHEDULE

SCHOOL FRPL ELIGIBLE	MEAN	SE	95% CI		SD	
			Lower Bound	Upper Bound		
< 10%	2.48	.135	2.218	2.749	a	
11%–20%	2.61	.156	2.300	2.917	b, c	
21%–30%	2.46	.153	2.156	2.760	d	
31%–40%	2.38	.163	2.058	2.704	e	
41%–50%	2.14	.160	1.821	2.452	b	
> 50%	1.98	.104	1.776	2.186	c, f, h	
	Type III Sum of Squares	df	Mean Square	F	SD	Partial $\eta^2$
Intercept	859.24	1	859.24	1,531.369	.000	.90
School FRPL eligible	9.85	5	1.97	3.510	.005	.10
Error	93.70	167	.56			
Total	1,010.00	173				

NOTE.—See table A1 note for an explanation of the letters in the SD column. ANCOVA = analysis of covariance; FRPL = free or reduced-price lunch; CI = confidence interval; FT = full time; PT = part time.  $R^2 = .087$  (adjusted  $R^2 = .056$ ).

TABLE A5  
ANCOVA OF SCHOOL FRPL ELIGIBILITY ON TOTAL DAYS CLOSED

SCHOOL FRPL ELIGIBLE	MEAN	SE	95% CI		SD	
			Lower Bound	Upper Bound		
< 10%	12.21	1.990	8.278	16.138	a, b	
11%–20%	14.04	2.273	9.555	18.532		
21%–30%	17.57	2.273	13.077	22.054		
31%–40%	18.11	2.569	13.037	23.185		
41%–50%	20.26	2.379	15.565	24.959	a	
> 50%	18.99	1.526	15.976	22.004	b	
	Type III Sum of Squares	df	Mean Square	<i>F</i>	SD	Partial $\eta^2$
Intercept	42,116.87	1	42,116.87	354.506	.000	.69
School FRPL eligible	1,344.40	5	268.88	2.263	.051	.07
Error	19,008.68	160	118.80			
Total	68,030.08	166				

NOTE.—See table A1 note for an explanation of the letters in the SD column. ANCOVA = analysis of covariance; FRPL = free or reduced-price lunch; CI = confidence interval; FT = full time; PT = part time.  $R^2 = .066$  (adjusted  $R^2 = .037$ ).

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